

The screenshot shows a Linux desktop environment with a terminal window on the left and two code editors on the right. The terminal window displays the output of a C++ program that calculates the sum, average, and minimum of a series of numbers. The code editors show the source code for two programs: 7-2.cpp and 7-1.c. The 7-2.cpp program prints numbers from 0 to 100 that are divisible by 3. The 7-1.c program calculates the sum, average, and minimum of a series of numbers.

```
#include <stdio.h>
int main()
{
    printf("The Numbers ");
    for (int i = 0 ; i <= 100 ; i++)
        if (not(i%3)) printf("%d\n",i);
    printf("are divisible by 3.\n");
    return 0;
}
```

```
#include <stdio.h>
#define inpt printf("Give a number : "); scanf("%f",&n); sum += n
int main()
{
    float n,max,min,avg,sum;
    inpt; min = max = n;
    for (int i = 1 ; i <= 9 ; i++)
    {
        inpt; sum += n;
        max = (n > max) ? n : max;
        min = (n < min) ? n : min;
    }
    avg = sum/10.0;
    printf("Sum = %.2f\nAverage = %.2f\nMin = %.2f\nMax = %.2f\n",sum,avg,min,max);
    return 0;
}
```

The screenshot shows a Linux desktop environment with a terminal window on the left and two code editors on the right. The terminal window displays the output of a C++ program that calculates the number of rabbits after a given number of years. The code editors show the source code for two programs: rabbits.cpp and 7-1.c. The rabbits.cpp program calculates the number of rabbits after a given number of years. The 7-1.c program calculates the sum, average, and minimum of a series of numbers.

```
#include <stdio.h>
int getRN(int);
int getYN(int);
int main ()
{
    int inpt; char c; agn:
    printf("Do you want to get years or number of rabbits (Y/R) ? ");
    scanf("%c",&c);
    switch (c)
    {
        case 'y': case 'Y':
            printf("Enter Number of years : ");
            scanf("%d",&inpt);
            printf("After %d years rabbits will be %d\n",inpt,getRN(inpt));
            break;
        case 'r': case 'R':
            printf("Enter Number of rabbits : ");
            scanf("%d",&inpt);
            printf("After %d years rabbits will be %d\n",getYN(inpt),inpt);
            break;
        default:
            printf("illegal input ...\n");
            goto agn;
    }
    return 0;
}

int getRN(int n)
{
    int x1=0,x2=1;
    for (int i = 1 ; i <= n ; i++)
    {
        x2 = x1 + x2;
        x1 = x2 - x1;
    }
    return x2;
}

int getYN(int n)
{
    int x1=0,x2=1,i=0;
    while (x2 < n)
    {
        x2 = x1 + x2;
        x1 = x2 - x1;
        i++;
    }
    return i;
}
```

```
omar@Omar:~$ g++ rabbits.cpp -o rabbits
omar@Omar:~$ ./rabbits
Do you want to get years or number of rabbits (Y/R) ? U
illegal input ...
Do you want to get years or number of rabbits (Y/R) ? Y
Enter Number of years : 8
After 8 years rabbits will be 34
omar@Omar:~$ ./rabbits
Do you want to get years or number of rabbits (Y/R) ? R
Enter Number of rabbits : 21
After 7 years rabbits will be 21
omar@Omar:~$
```